

TOP SECRETCONTROL NO. TCS-10311/71

BOOTLEG

REFERRED TO OFFICE	RECEIVED			RELEASED		SEEN BY	
	SIGNATURE	DATE	TIME	DATE	TIME	NAME & OFFICE SYMBOL	DATE

Handle Via Indicated Controls

TALENT-KEYHOLE

.....

.....

.....

.....

Declass Review by NIMA/DOD

WARNING

This document contains information affecting the national security of the United States within the meaning of the espionage laws U. S. Code Title 18, Sections 793 and 794. The law prohibits its transmission or the revelation of its contents in any manner to an unauthorized person, as well as its use in any manner prejudicial to the safety or interest of the United States or for the benefit of any foreign government to the detriment of the United States. It is to be seen only by personnel especially indoctrinated and authorized to receive information in the designated control channels. Its security must be maintained in accordance with regulations pertaining to TALENT-KEYHOLE Control System.

TOP SECRET

GROUP 1
Excluded from automatic
downgrading and declassification

TOP SECRET

TCS-10311/71
11 January 1971

Copy _____

MEMORANDUM FOR: Chief, Technical Services Group, NPIC
ATTENTION : Chief, PPS/TSG
SUBJECT : RED Monthly Report (December 1970)

Significant Items of Interest for December 1970:

1. Automatic Target Indexing Device [REDACTED] - This equipment was delivered to NPIC in December and installed in Room 2N617. It is currently being "debugged" and should be available for demonstrations and T&E by mid-January. It will then be used in an operational test program prior to receipt of [REDACTED] 25X1A 25X1D
 2. Image Comparison Microstereoscope [REDACTED] - The overrun funding to complete this equipment has been approved and work will shortly commence to finish it. Delivery is scheduled for April. After T&E, this device will be put through an extensive operational utility test program at NPIC by the [REDACTED] 25X1A
 3. Engineering Audit of the Stereo Scanner [REDACTED] - This audit will be essentially completed in late December. [REDACTED] personnel will present to RED a preliminary briefing on their results in early January. 25X1A 25X1A
 4. Wide-Field, High-Power Anamorphic Stereoviewer [REDACTED] - This project is essentially on schedule. Complete optical design is nearly complete and optical components are under procurement by [REDACTED] 25X1A 25X1A
 5. Utility of Stereo Scanning [REDACTED] - The testing schedule (as originally planned) is being delayed primarily because of a delay in delivery of the [REDACTED] Stereocomparator and some conflicts over the use of the comparator when it arrives. A new testing schedule is being developed in conjunction with IEG and T&E personnel. 25X1A 25X1D
- [REDACTED]

GROUP 1
Excluded from automatic
downgrading and
declassification

TOP SECRET

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY

TOP SECRET

TCS-10311/71

25X1A 7. [REDACTED] Stereocomparator - The schedule has slipped
25X1A due to problems of "debugging" the computer program. The acceptance
tests at [REDACTED] will now begin 25 January 1971 instead of 14 December
1970 as planned.

25X1A 8. [REDACTED] 1540 Light Table - The first table passed preacceptance
tests at [REDACTED] during the first week of December. The first six tables
arrived in the Center on 11 December; fifteen more arrived on 23 December.
The tables are presently in EPB/ESD for check-out.

9. Briefings have been presented to Center management and the
necessary paperwork forwarded for approval on the following items:

- a. Calibration Device for the HPSC - Phase II;
- b. Modification of the RIPPS Dry Diazo to Dry Silver; and
- c. Dry Color Development.

10. Meetings, Briefings, etc.:

- a. [REDACTED] attended CCB meeting with regard to the
[REDACTED] Dry Silver Presentation on 15 December.
- b. On 16 December, [REDACTED] Chief Scientist,
[REDACTED] visited the Center for codeword clearance briefings
and contract consultation.
- c. Six contractors visited NPIC on 17 December to inspect
the [REDACTED] 1540 light table in connection with an RFP for
a High Intensity Tracking Light Source.
- d. The C/RED, DC/RED, and C/SDB visited [REDACTED]
Operation for a presentation on the Precise Mensuration
Study on 21 December.
- e. A briefing on ATB/RED was held for [REDACTED] on 23
December. The briefing covered the overall laboratory
facilities and programs. Demonstrations were given of
the electron microscope, chemical image manipulation,
and the Color Gamut Program. The Executive Director was

TOP SECRET

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY

TOP SECRET

TCS-10311/71

SUBJECT: RED Monthly Report (December 1970)

e. (cont.)

briefed on the overall [REDACTED] program. A demonstration of optical image processing was given and the Tech/Ops Image Manipulation facility was described. [REDACTED] will be briefed on ATB [REDACTED] experiments in January.

25X1A

25X1A

25X1A

f. ATB [REDACTED] personnel briefed Chief, IEG, and his Division Chiefs on the OSI, NPIC Stereo Acuity Research Program.

g. ATB [REDACTED] personnel briefed C/OD/IEG and C/PB/SS on the status of the OMS, NPIC Test Evaluation Program.

h. ATB [REDACTED] personnel briefed Offutt PI School personnel on the [REDACTED] Target Recognition Training and Mensuration Training programs under NPIC's Imagery Interpretation Research contract. Offutt will evaluate these training packages for potential incorporation in the course curriculum at Omaha.

11. OMS, NPIC Test Evaluation Program - OMS/PSS and ATB [REDACTED] personnel have initiated the first phase of a comprehensive evaluation of the NPIC Personnel Selection Test Battery. Attention is currently being directed at the relationship of sex and military background on test scores on the Army PI Test Battery. Preliminary results are expected within 60 days.

25X1A

12. OSI, NPIC Stereo Acuity Research Program - OSI/LSD and ATB [REDACTED] personnel have begun work on a Stereo Acuity Research Program. The Technical Services Branch, DIAAP-9, is providing a light table, microstereoscope, and subjects. IEG, a room and subjects; and [REDACTED] a laser optometer and technical guidance. A pilot study employing ATB personnel is tentatively scheduled 5-8 January, and the formal testing program 11-29 January.

25X1A

13. [REDACTED] Equipment Development Support - A human factors evaluation report on the [REDACTED] 10" x 10" stereocomparator mockup was delivered.

14. [REDACTED] - Discussions were held with [REDACTED] or [REDACTED], concerning their work on readout of phase imagery for [REDACTED]. The approach taken is optical while proposed approach for ATB is chemical. However, some of the techniques will be useful and full coordination will be maintained.

25X1A

TOP SECRET

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY

TCS-10311/71

SUBJECT: RED Monthly Report (December 1970)

25X1A

15. Vision Committee, National Research Council Support - On 16 December, ATB/HFS personnel and [REDACTED] met with [REDACTED] of the National Research Council Committee on Vision to discuss Council assistance to the Center in evaluating [REDACTED] Color Training Program and in endorsing and distributing to the academic community [REDACTED] Photo Interpretation Bibliography.

16. The [REDACTED] Viscometer - This instrument was received by the Exploratory Laboratory. It will be used for measuring the viscosity of experimental viscous developers formulated in the Lab.

17. Microdensitometry Support - ATB/ITL provided IAS with 74 traces of three bar target groups and six traces of step wedges. These traces are in support of IAS's attempt to evaluate three diazo films and two printers.

18. Color Microdensitometer Calibration [REDACTED] Modifications to the [REDACTED] Micro-d have been completed and the new Zeiss objectives delivered. Color Gamut data has been delivered to [REDACTED] and the color effective exposure work is proceeding. The contract will probably require a one or two-month, no-cost extension for completion.

25X1A

19. Proposals and Reports Received/Evaluated:

a. A proposal for consultation work on chemical image manipulation was received from [REDACTED] formerly of [REDACTED]. The proposal has been evaluated.

25X1A
25X1A

b. [REDACTED] Unconventional Film Evaluation. Evaluations completed and PAR being prepared.

c. [REDACTED] Two proposals on phosphor screen materials were received. Evaluation is in progress.

d. [REDACTED] Color viewing and measuring standards, evaluation completed. PAR is being written.

e. [REDACTED] Study of the colorimetric and physical properties of Variable Contrast Illuminator. Being evaluated.

TOP SECRET

HANDLE VIA
TALENT-KEYHOLE
CONTROL SYSTEM ONLY

TCS-10311/71

SUBJECT: RED Monthly Report (December 1970)

[REDACTED]

25X1D

- g. Stereo Acuity as a Function of Age and Experience as a Microscopist (OSI/LSD). Evaluation completed. In-house research phase to begin 5 January.
- h. Improvement in Small Image Mensuration (PAR 1885). Evaluation in process.
- i. A Proposal to Evaluate Four Image Manipulation Techniques for Photointerpretation [REDACTED] Evaluation completed; effort postponed pending further work in manipulation techniques.
- j. Color Support [REDACTED] Evaluation completed; [REDACTED] to submit revised proposal in smooth.
- k. Instrumented Microscope for [REDACTED] Evaluation completed; rejected for HF purposes as duplicative.
- l. Unsolicited letter proposal for Enhancing Human Performance on Complex Perceptual Tasks [REDACTED] Evaluation in process.
- m. Development of Specifications for an Audio Clueing Information System [REDACTED]. Being evaluated.

25X1A

25X1A

25X1A

25X1A

25X1A

25X1A

25X1D

20. Contract Signed: A follow-on contract with [REDACTED] has been approved. He met with ATB [REDACTED] IEG/OD, and TSG/ESD personnel on 23 December to develop a PI equipment training program.

21. Lectures [REDACTED] presented the third set of lectures on geometrical optics and photometry on 3-4 December. Members of RED, ESD, and APSD attended.

22. Report on [REDACTED] was completed. Preliminary working copies were distributed within RED. Center-wide distribution awaits reproduction and will probably occur early in January 1971.

25X1A

25X1D

25X1D

TCS-10311/71

SUBJECT: RED Monthly Report (December 1970)

23. Support to the Color Task Force continued on a sporadic basis. Only one meeting was held during the month.

24. Continued liaison on [REDACTED] special project.

25X1A

25. Meetings were held with [REDACTED] concerning NPIC Training Manual and other training considerations.

25X1A

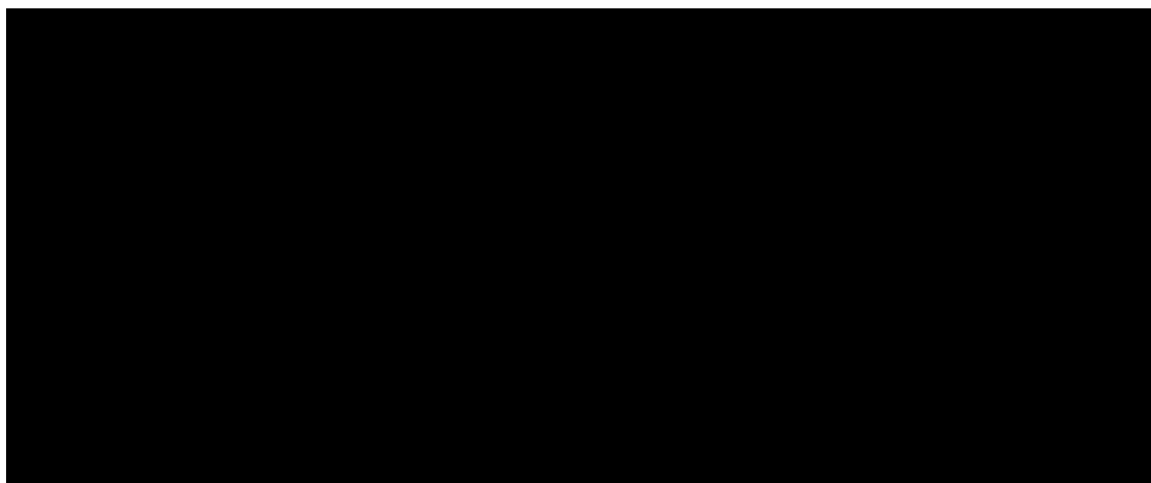
26. Meetings were attended at [REDACTED] concerning optical titling of film, as well as meetings at CIA Headquarters and SOC, Pentagon, on Post Flight Analysis Team and reports control manual for [REDACTED]

25X1A

27. In-house meetings were conducted on data transmission and priorities, plus additional meetings concerning optical titling requirements. Attendants were representatives from PSG/AID, TSG/APSD, and TSG/RED.

28. The following persons visited RED/RSB for a variety of technical sessions:

25X1A



29. [REDACTED] visited Patrick Air Force Base on [REDACTED] and [REDACTED] projects.

25X1A
25X1A

30. [REDACTED] continued holding many sessions on [REDACTED] completing plans and identifying operational and training problems associated with the exploitation [REDACTED]

25X1A

TOP SECRET

TCS-10311/71

SUBJECT: RED Monthly Report (December 1970)

31. RSB/RED reviewed an [REDACTED] evaluation report that is to be forwarded to ORD.

25X1D

32. [REDACTED] test flight No. 4 took place on 22 December. The test flight was not completely successful due to weather. No flights are planned for January, while two are presently scheduled for February. The first payload flight is now programmed for March.

25X1A

[REDACTED]
Deputy Chief,
Research & Engineering Division,
TSG/NPIC

25X1A

TOP SECRET